ABSTRACT OF THE DISCLOSURE

[0277] A system for visually representing user behavior within an interactive voice response (IVR) system of a call processing center generates a complete sequence of events within the IVR system for plural calls to the call processing center, the plurality of calls being recorded from end to end. A call flow of the IVR system is modeled as a non-deterministic finite-state machine, such that a start state of the finite-state machine represents a first prompt of the IVR system, other states of the finite-state machine represent subsequent prompts at which a branching occurs in the call flow of the IVR system, exit conditions are represented as end states, and transitions of the finite-state machine represent transitions between call flow states triggered by data inputted by a user or by internal processing of the IVR system. The complete sequences of events for the plural calls are provided to the finite-state machine to produce a two-way matrix of several counters. The data from the two-way matrix is represented as a state-transition diagram.